



IDAHO TRANSPORTATION DEPARTMENT

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February 15, 2012

U.S. EPA Region 10
Office of Water
Attn: Ms. Julie Congdon - Storm Water Program
1200 6th Avenue (OW-130)
Seattle, Washington 98101

Re: MS4 2010 Annual Report

Dear Ms. Congdon:

The Idaho Transportation Department, District 1 hereby submits the enclosed MS4 Permit No. IDS-028223 Annual Report for 2011 and certifies the following:

"I certify under penalty of the law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties of submitting false information, including the possibility of fine and imprisonment for knowing violations."

Please feel free to call me at 208-772-1200 if you have any questions or concerns regarding this report.

Sincerely,

Idaho Transportation Department

A handwritten signature in blue ink, appearing to read 'Damon Allen', is written over a horizontal line.

Damon Allen, P.E.
District Engineer

Cc: Idaho Department of Environmental Quality

Enclosure: MS4 2011 Annual Report

**MUNICIPAL SEPARATE STORM SEWER SYSTEM
(MS4)
EPA NPDES PERMIT NO.: IDS-028223
2011 ANNUAL REPORT**

**IDAHO TRANSPORTATION DEPARTMENT
DISTRICT ONE
Kootenai County
Coeur d'Alene, Idaho**

**SUBMITTED BY:
IDAHO TRANSPORTATION DEPARTMENT
DISTRICT ONE**

**FOR THE REPORTING PERIOD:
JANUARY 1, 2011 TO DECEMBER 31, 2011**

FEBRUARY 15, 2012

INTRODUCTION

This Annual Report has been submitted by the Idaho Transportation Department District One (ITD) in response to reporting requirements set forth in Part IV.C of the EPA Permit #IDS-028223. This permit was issued by the Environmental Protection Agency (EPA) in compliance with the National Pollutant Discharge Elimination System (NPDES) regulations covering storm water discharges from ITD's Municipal Separate Sewer System (MS4) located in Coeur d'Alene, Idaho. This report is hereby submitted to EPA and the Idaho Department of Environmental Quality (DEQ) to satisfy the permit reporting requirements for the third Annual Report covering the period from January 1, 2011 through December 31, 2011. The purpose of this Annual Reports is to document progress toward achieving the minimum control measures identified by ITD's Stormwater Management Program (SWMP) associated with the ITD D1 MS4. This report is organized in the general order of the SWMP components as specified by Parts II.B, II.C and IV.C of the Permit. Each permit requirement has been summarized in italics for ease of reference. The EPA permit and report documentation can be accessed on the ITD website at: <http://www.itd.idaho.gov/enviro/storm%20water/ms4/default.htm>

MINIMUM CONTROL MEASURES IDENTIFIED BY THE SWMP

1. Public Education and Outreach

Requirements: within two years of the effective date of ITD's MS4 permit (effective date: January 2009), the permit requires the implementation of an education program to educate its audiences about the impacts of storm water discharges on local water bodies and the steps that ITD employees, contractors, or other ITD agents can take to reduce pollutants in stormwater; provide education and training program; and distribute education materials to employees, citizens and businesses with whom the permittee interacts.

ITD Stormwater Training Opportunities – ITD offers instructor led training opportunities in the area of stormwater management and sediment and erosion control. In 2011, ITD provided the following statewide training opportunities to ITD personnel, consultants and construction contractors:

- Resident Engineer Training (16 hours)/None held in 2011
- Environmental Inspector Initial Qualification (24 hours)/29 people
- Environmental Inspector Requalification (8 hours)/90 people
- Water Pollution Control Manager Training (16 hours)/137people
- Stormwater for Designer Training (16 hours)/56 people
- Trout Unlimited-Streambank Soil Bioengineering Technical Training (24 hours)/21 people
- NHI-Managing Road Impacts on Stream Ecosystems (24 hours)/25 people

ITD Stormwater Management, Sediment and Erosion Control Guidance - ITD and the consultant firm, Brown and Caldwell have developed extensive stormwater guidance for stormwater planning, design and construction BMPs for general use by ITD, contractors, consultants, other agencies and the general public. Ongoing improvements were made to the ITD website relative to the subject of stormwater during the past reporting period. The ITD website is used as the principal tool for disseminating stormwater information and continues to be the appropriate location to reference the most recent stormwater guidance from ITD.

Interagency Cooperation – ITD continues to lend support to the Panhandle Area Council’s Stormwater Erosion Education Program (SEEP). The SEEP and its educational materials were developed to educate public and private entities in the Northern Idaho area about stormwater related issues. In particular, this program helps construction contractors minimize sediment and other pollutant discharges to surface water and to achieve compliance with local, state and federal rules and regulations. ITD will continue to assist the Council by participating in its sponsored events and helping to distribute information about SEEP to the public.

ITD Stormwater Newsletters - ITD develops and distributes a quarterly stormwater management newsletter under a contract with the firm Brown and Caldwell. The newsletter focuses on the latest stormwater, sediment and erosion control news and information in Idaho. The newsletter is the product of “education requirements” identified by the EPA/ITD Consent Decree (in effect from 2006 to 2011 and terminated in 2011). Four quarterly newsletters were produced in 2011 in March, June, September and December. The newsletters are attached to this report and are also available on the ITD website.

2. Public Involvement/Participation

Requirements: The permittee must comply with applicable State and local public notice requirements when implementing public involvement/participation program; within two years of the effective date of the permit, the permittee must make SWWP documents and Annual Reports available to the public and posted online. At least once per year the permittee must coordinate, promote and participate in the “Adopt a Highway” program.

ITD Public Involvement Policy – As a federally funded transportation agency, ITD is bound to implement an effective public involvement process that fulfills multiple legal responsibilities, such as those required by the National Environmental Policy Act (NEPA). ITD operates from the Statewide Transportation Improvement Program (STIP) which is a staged, multi-year, intermodal program of transportation projects. The STIP is updated annually following a period of public availability. On a project specific basis, each ITD project must address public involvement goals and objectives and fulfill legal responsibilities. Public involvement plans and

outreach efforts vary from project to project depending on project complexity. Generally, a public hearing is required for all projects, although this requirement is often waived for very simple projects, such as pavement rehabilitations and other facility maintenance projects. More complex projects, such as highway reconstruction/realignment and interchange construction require greater public involvement effort, such as multiple open house public meetings and hearings. In 2011, there were no projects involving the I-90 MS4 that required public meetings or hearings. Additionally, ITD seeks to comply with all local stormwater management rules and regulations related to public involvement and participation.

ITD Website - ITD has included an MS4 section on its website. The ITD D1 MS4 permit, annual reports and MS4 map are available on the website for viewing. The public can contact ITD with any comments or questions through the website.

ITD Maintenance Section Public Involvement - ITD's Maintenance Engineer and staff are responsible for performing highway maintenance activities on ITD right of way, including maintenance of stormwater infrastructure. Any public or regulatory agency concerns and comments can be directed to the ITD District Maintenance Engineer at any time during normal business hours by calling 208-772-1200, accessing the ITD website or by visiting or writing to the District 1 Office at 600 W. Prairie Avenue Coeur d'Alene, Idaho 83815.

ITD Transportation Planning Activities - ITD routinely participates the Kootenai Metropolitan Planning Organization (KMPO) quarterly meetings. Formed in 2003, KMPO and its technical arm, the Kootenai County Area Transportation Team (KCATT), meet monthly to facilitate its mission, which is to oversee transportation activities within the federally designated urban area boundary, develop the transportation work plan and a transportation demand model. The KMPO consists of several transportation and land use planning organizations, including: Cities of Coeur d'Alene, Post Falls, Hayden, Rathdrum, Kootenai County, Post Falls Highway District, Lakes Highway District, Eastside Highway District and ITD. The KMPO process also helps shape projects that may become incorporated into ITD's STIP, as discussed earlier. KMPO meetings include an open public comment agenda item to allow for public involvement in KMPO activities. Stormwater issues or concerns may be raised by the public during KMPO meeting. In 2011, there was no indication to ITD of stormwater-related public comments, as voiced during KMPO activities. The KMPO/KCATT public involvement forum will continue and provide a forum for public involvement with the MS4.

Open Houses - As partial fulfillment of its own MS4 responsibilities, the City of Coeur d'Alene has been organizing public open houses periodically to provide information about stormwater management and water quality in general. The City encourages other MS4 entities in the area to

participate in the event. ITD was represented at the City's September 27, 2011 event and will continue to assist the City with similar future events (see list of attendees).

Adopt a Highway Program – ITD's Adopt a Highway Program began in 1990. The program allows volunteer groups to pick up trash and debris along a preselected 2-mile segment of highway in the spring and fall. ITD coordinates the logistics and provides trash bags, signs, vests, and flags to the groups and picks up the bags for disposal at the public land fill. In 2011, the program involved 182 groups (1486 participants) and cleaned 329 miles of roadway (including I-90 through Coeur d'Alene) and recovered 100,276 pounds of litter. ITD will continue to facilitate the Adopt a Highway Program.

3. *Illicit Discharge Detection and Elimination*

Requirements: a) within two years from the effective date of the permit, ITD must develop a program to detect and eliminate illicit discharges to the ITD MS4; b & c) develop an ordinance or other regulatory mechanism to effectively prohibit non-storm water discharges and implement appropriate enforcement procedures; d) within two years, refine and complete MS4 mapping; e) within two years, develop an education/training program to inform employees, contractors or other agents about the hazards associated with illegal discharges and improper disposal of waste; f) within three years, initiate dry weather field screening and inventory all industrial facilities that discharge to MS4 system; and g) within three years, the permittee must inventory all industrial facilities that discharge into the permittee's MS4.

I-90 Right of Way - As a transportation agency, ITD monitors and controls activities that occur within the highway right of way of I-90. There are no private parcels that have direct access to or connect with the I-90 facility. ITD does not regulate land uses or establish stormwater regulatory policy on private land adjacent to the right of way. While there is some exposure to possible acts of illicit discharges within the highway right of way, public access to the I-90 stormwater drainage system is generally highly visible and restricted, which reduces the likelihood of the I-90 stormwater system becoming a direct target for illicit discharges. ITD's illicit discharge monitoring program will basically involve the continuation of the typical surveillance efforts provided by ITD maintenance staff and other agency representatives as they travel through or maintain I-90 within the City of Coeur d'Alene. In addition, ITD evaluates the general condition of the MS4 and water quality conditions during sampling events and notes any unusual conditions or special concerns related to the potential for illicit discharges to the system. No illicit discharges were observed during system inspections/sampling events conducted in June, August, or November of 2011.

City/ITD MS4 Interconnections - The ITD MS4 and the City of Coeur d'Alene MS4 are connected at several points along the I-90 beltway through Coeur d'Alene, including connections at Government Way, 4th Street, 7th Street, Syringa Avenue, 15th Street, Harrison Avenue, East Hastings Avenue, Pennsylvania Avenue, and Sherman Avenue. In addition, French Gulch enters the I-90 stormwater drainage system at the Sherman Avenue Interchange. French Gulch drains primarily residential areas on the east side of Coeur d'Alene. There is some potential for illicit discharges to enter the I-90 stormwater system through the City's stormwater system because these areas include a mix of commercial and residential development adjacent to the City's MS4. Illicit discharges that originate within the City of Coeur d'Alene's stormwater system up gradient from one of the I-90 connection points, could ultimately enter the I-90 stormwater system and drain to the MS4 outlet at Fernan Creek, depending on the proximity of the source to I-90, the type of discharge, or the relative duration and size (volume) of the illicit discharge. ITD's ability to detect illicit discharges in the I-90 right of way or those originating within the City's stormwater system is limited to observations (visual or sampled) that are made within the I-90 stormwater system, particularly at open ditch locations below hard pipe outfalls. No illicit discharges were observed during system inspections/sampling events conducted in June, August, or November of 2011.

Dry Weather Screening - On August 17, 2011, the I-90 stormwater system was visually observed at open ditches and pipe outfalls during a routine water quality sampling event. The sampling coincided with typical dry weather conditions of the summer season, therefore no water was present and samples could not be collected at that time. This sampling event served as the second dry weather field screening event, as required by subsection (f) of the Permit. If an illicit discharge were to occur during a dry weather field screening event, it could be indicated by evidence of running or standing water or soil saturation within open ditch portions of the system. None of these conditions were observed during the dry weather screening event conducted during this reporting period.

ITD plans to continue annual inspections of the I-90 stormwater system during extended dry weather periods (i.e., August). If runoff or saturated conditions are observed within the MS4 at the time of inspection, ITD will collect samples for analysis if possible, and inform the City of the observation. ITD will request an investigation by the City which would involve observations of the condition of the City's system at the closest access point up gradient from the City/ITD MS4 connection (i.e., at the nearest City owned manhole location). Any such investigation will be completed within 15-days from the time of detection as required by the Permit.

Spill Response - ITD's spill response procedures are identified in the *Transportation Incident Management Plan for the State of Idaho, January 2008*. This document can be obtained from the ITD website at:

http://www.itd.idaho.gov/publications/detour/ITD%20TIM%20Plan_Final_2008.pdf

Complaint Filing - ITD has also set up an electronic file folder to record and track any public complaints or information that may be received. Complaints or other information related to MS4 management and operation can be communicated to the District 1 Headquarters office at 208-772-1200. No specific complaints were recorded during the 2011 reporting period.

ITD Regulatory Limitations and Ability to Control Illicit Discharges - There are no connections to the I-90 storm water system except at the points where the City's stormwater system enters the I-90 system. As such, non-stormwater discharges can generally only enter the I-90 stormwater system from connection points within the City's storm water system. ITD cannot regulate land uses or establish stormwater regulatory policy within the City's corporate boundary. ITD therefore cannot establish an ordinance or other regulatory mechanism that would effectively control non-stormwater discharges to the system. ITD will detect and control illicit discharges that originate within the right of way through ongoing surveillance and the use of existing law enforcement response mechanisms.

ITD MS4 Map - ITD has developed a stormwater infrastructure map of the I-90 facility within the city limits of Coeur d'Alene. The map was prepared from the City's Geographic Information System (GIS) database of the existing citywide stormwater system and the original I-90 construction plans. The map consists of ITD's current understanding of the I-90 stormwater system layout, specifications and connection points with the City MS4. The map may be modified over time with new information and is posted on the ITD website for viewing at: <http://www.itd.idaho.gov/enviro/storm%20water/ms4/GIS%20Maps/MS4%20Map%20of%20CdA.pdf>.

Illicit Discharge Training - As discussed in Control Measure (1a), ITD implements an ongoing stormwater education and training program for its employees and interested contractors in the area of NPDES regulations, stormwater management, and sediment and erosion control BMPs. The program will be maintained, updated and revised periodically as regulations change and BMP technical support materials are updated. Additionally, ITD maintenance staff operating within the MS4 area will be periodically informed of the MS4 permit requirements and the need to be aware of the hazards associated with illegal discharges and improper disposal of waste.

4. Construction Site Stormwater Runoff Control

Requirements: a) within two years of effective date of the permit, the permittee must review, implement, and enforce a program to reduce pollutants in construction runoff to the MS4 from land disturbances greater than one acre; b) provide appropriate information and direction to contractors working on ITD projects to ensure compliance with the NPDES CGP #IDR10-0000; c) within two years, the permittee must adopt an ordinance or other regulatory mechanism to require all construction site operators to practice appropriate sediment and erosion and waste control; d) within two years, the permittee must publish and distribute requirements for construction site operators appropriate sediment and erosion and waste control; e) within two years, the permittee must develop procedures for reviewing all pre-construction site plans for potential water quality impacts; f) within two years, the permittee must implement a program to receive, track and review information submitted by the public regarding construction site sediment and erosion control complaints; g) within three years, the permittee must develop and implement procedures for site inspection and enforcement of measures as required in Parts II.B.4.c and d; and h) the permittee must comply with the Construction General Permit and local requirements and ensure that all contractors working on behalf of the permittee are in compliance.

ITD's Construction Site Stormwater Control Policies, Planning and Minimum Standards – Any discussion about ITD's construction site stormwater control efforts needs to be prefaced by stating that ITD does not have the authority to regulate private land use and private construction site activities or pass a stormwater ordinance. ITD develops highway construction plans, advertises bid proposals to contractors, inspects contractor construction activities and performs maintenance activities using state forces when needed. There is no private access to the I-90 right of way and no direct storm water discharges from private properties into the I-90 system. Future construction activities within the I-90 right of way in the MS4 area will generally be limited to ITD projects for highway expansion or maintenance. ITD processes right of way encroachment permits for entities that propose to work within ITD rights of way and although such proposals within the access controlled right of way of I-90 are rare and unlikely; private or public utilities may seek access to the I-90 right of way in the future, at which time ITD will inform such utilities about minimum ITD standards and local stormwater jurisdiction requirements.

ITD's sediment and erosion control policy requires sediment and erosion control plans for all earth disturbing construction projects. ITD and its contractors are bound to comply with the requirements of NPDES Construction General Permit (CGP), including the submission of NOIs and the preparation and implementation of SWPPPs, for construction projects that disturb greater than 1 acre of ground and discharge to surface waters of the U.S. ITD's sediment and erosion control policy is implemented through standard contract specifications known as "Environmental

Protection” (Section 107.17) and “Clean Water Act Compliance”. The Environmental Protection specification is included in all ITD construction contracts and the Clean Water Act Compliance specification is included on projects that require coverage under the CGP. ITD SWPPPs must meet all of the CGP requirements, including any local stormwater ordinance requirements. The most recent versions of these specifications are available on the ITD website.

As previously stated, ITD does not have stormwater regulatory control over its contractors working on ITD construction projects, however the Department does have the option to impose contractor penalties through its contracts or otherwise withhold contract payment when necessary to ensure adequate stormwater control performance from its contractors.

ITD has developed stormwater control guidance tools to help its employees and contractors achieve compliance with stormwater rules and regulations. The most recent information can be referenced on the ITD website. ITD also produces and distributes (via the web) its quarterly stormwater newsletters, known as *Storm Events* to its employees, contractors or any other interested parties. ITD also prepares and includes draft SWPPPs in its project bid proposal documents to assist contractors with the task of finalizing SWPPPs and submitting NOIs. ITD thoroughly reviews all contractor provided SWPPP information for completeness before authorizing the submission of contractor NOIs. ITD uses a customized stormwater inspection form (ITD Form #2802) to improve the effectiveness of stormwater inspections and follow-up actions conducted by its project Environmental Inspectors and contractors.

In accordance with NPDES stormwater rules and regulations, the public has an opportunity to review ITD project NOIs and SWPPPs. All comments pertaining to ITD stormwater control plans are addressed accordingly and filed in project records. As part of ITD MS4 stormwater program, ITD has established an internal filing system to record public input and complaints related to operation of the MS4.

5. Post-Construction Storm Water Management in New Development and Redevelopment
Requirements: a) within three years of effective date of the permit, the permittee must implement and enforce requirements to address post-construction stormwater runoff from projects disturbing greater than one acre; b) within three years, the permittee must adopt an ordinance or other regulatory mechanism to address post-construction runoff from projects; c) within three years, the permittee must ensure proper long-term operation and maintenance of all permanent stormwater management controls located within its jurisdiction; d) within four years, the permittee must develop and implement a process for pre-construction plan review of permanent stormwater management controls and inspection of such controls to insure proper installation and long-term operation and maintenance.

ITD currently considers post-construction runoff quality from all projects it develops and implements with the goal of achieving minimum standards for stormwater treatment, as established by local stormwater authorities. Such requirements can involve the design, construction and maintenance of stormwater treatment features that reduce stormwater pollutant loads in discharges. Common treatment features incorporated into ITD projects include grassy swales, sedimentation vaults and filters or sediment ponds. ITD will continue to incorporate stormwater treatment concepts into any future highway improvement plans within the MS4. In 2011, ITD did not design or construct highway improvement projects within the MS4 area and no such projects are currently scheduled.

6. Pollution Prevention and Good Housekeeping for Municipal Operations

Requirements: a) within two years from the effective date of this permit, the permittee must develop and implement an operation and maintenance program intended to prevent and reduce pollutant runoff from the permittee's operation; b) within two years, and annually thereafter, the permittee must develop and conduct appropriate training for ITD's employees related to optimum maintenance practices as required above; c) Within two years, the permittee must prepare and implement a stormwater pollution prevention plan for the two maintenance yards located within the urbanized area.

ITD's maintenance staff works to ensure that I-90 and its MS4 are maintained in proper working condition and free of hazards and non-stormwater pollution sources. ITD will continue to provide ITD training opportunities to staff responsible for O&M of the I-90 MS4, including training for ITD NPDES inspectors.

The principle stormwater pollutant in highway runoff is sediment (sand) from highway sanding operations. Sediment deposits can build up along roadway shoulders, catch basins and within open ditches along the roadway. Maintenance activities to address sedimentation of the system include periodic shoulder shaping, drop inlet sediment removal and ditch cleaning to maintain the original line and grade of the stormwater system. In recent years ITD has scaled back on its use of sand for use as anti-skid material and now uses more salt brine than in the past. Less sanding on I-90 generally means less frequent maintenance to remove sand deposits on shoulders and from drop inlets and ditches. Routine roadway brooming and drop inlet maintenance was conducted in April of the reporting period.

ITD maintenance personnel inspected the I-90 stormwater conveyance system in August 2011. All of the highway embankment slopes along the facility are currently stable with no signs of erosion. The catch basins, piping and ditches appear to be in proper working condition.

Currently ITD has no concerns with the MS4 operation and no immediate plans to perform ditch maintenance. In the future, if sediment removal becomes necessary again, the work will be conducted during dry weather periods when the MS4 is dry and the potential for sediment discharge is low.

Operation and maintenance (O&M) of the I-90 MS4 does not require the any of the following activities: fleet vehicle maintenance and washing; materials storage; building maintenance; grounds/park maintenance; hazardous material storage; used oil recycling; sand/salt storage; solid waste transfer activities; spill control and prevention measures for refueling facilities; or snow disposal site operation.

The two maintenance yards located within the Coeur d'Alene Urbanized Area are located at 600 W. Prairie Avenue (District Headquarters) and at 2800 Ramsey Road (known as "the 40-acres"). Neither of these sites discharge to the MS4 or any surface waters of the U.S. Both of these sites are equipped with pollution prevention BMPs. A description of the sites and pollution prevention BMPs are available upon request.

7. CONTROL OF THE DISCHARGE OF POLLUTANTS OF CONCERN

Requirements: conduct stormwater discharge monitoring as required in Part IV of the permit (no later than 18 months from the effective date of the permit); determine whether stormwater discharges from any part of the MS4 contribute pollutants of concern to 303(d) listed water bodies; and within one year from the effective date of this permit the annual report must include a description of how the activities in each of the minimum control measures will be targeted to control pollutants of concern, prevent an in-stream violation of water quality standards and provide discussion of how the permittee will evaluate and measure the effectiveness of SWMP measures.

The objectives of the water quality monitoring, as identified in Part IV.A.2 of the permit are as follows:

- Estimate the pollutant loading currently discharged from the MS4;
- Assess the effectiveness and adequacy of control measures implemented through this permit; and
- Identify and prioritize those portions of the MS4 requiring additional controls.

EPA has required a minimum of four grab samples per year to be taken from French Gulch and the MS4 outlet at Fernan Creek. Samples are to be analyzed for the parameters listed in Table IV.A of the Permit. In response to these monitoring objectives and minimum requirements, ITD

has identified four locations to gather grab samples and corresponding flow measurements per the required frequency specified in Table IV.A of the Permit. These locations include the following: Station #1 – MS4 Open ditch at Shernan Avenue box culvert; Station #2 – MS4 open ditch above Sherman Avenue Interchange; Station #3 - French Gulch, above I-90; and Station #4 – MS4 open ditch above 15th Street Interchange. A fifth site located below the 15th Street interchange was identified and monitored in 2011. This site is a 24” concrete outfall pipe that appears to drain stormwater from city streets in the vicinity of 15th Street. Laboratory results from the reporting period are attached.

8. RESULTS OF INFORMATION COLLECTED AND ANALYZED DURING THE PREVIOUS 12 MONTH PERIOD:

See Attached.

9. SUMMARY OF THE NUMBER OF INSPECTIONS, FORMAL ENFORCEMENT ACTIONS AND SIMILAR ACTIONS PERFORMED BY THE PERMITTEE:

ITD performed at least four inspections of the MS4 during 2011 to evaluate ITD/City MS4 connections, assess specific locations and methods for water quality sampling and to conduct water quality sampling. No formal enforcement actions or recommendations were filed.

10. SUMMARY OF NON-EPA RELATED COMPLAINTS AND/OR ENFORCEMENT ACTIONS:

None.

11. COPIES OF EDUCATIONAL MATERIALS, ORDINANCES, INVENTORIES, GUIDANCE MATERIALS OR OTHER PRODUCTS:

Refer to ITD website.

12. ACTIVITIES TO BE UNDERTAKEN IN COMING YEAR:

Continue water quality monitoring; make improvements to the water quality monitoring stations; conduct dry weather survey.

13. DESCRIPTION AND SCHEDULE FOR IMPLEMENTATION OF ADDITIONAL BMPS THAT MAY BE NECESSARY BASED ON MONITORING RESULTS TO ENSURE COMPLIANCE WITH APPLICABLE WATER QUALITY STANDARDS:

Not Applicable at this time.

**14. NOTICE IF THE PERMITTEE IS RELYING ON ANOTHER ENTITY TO
SATISFY PERMIT OBLIGATIONS:**

Not Applicable at this time.

ATTACHMENTS

Stormwater Newsletters

Public Information Meeting documentation

Water Quality Laboratory Results



STORM EVENTS

Volume 5, Issue 3

ITD Quarterly Stormwater Newsletter

SPRING 2011

Promoting Responsible Stormwater Management Practices throughout the Idaho Transportation Department

IMPORTANT REMINDER: Definition of a "Rain Event"

Understanding the definition of a rain event is critical for ITD to achieve full compliance with the Consent Decree (CD) and the Construction General Permit (CGP). Specifically, CD Paragraph 7.A states "Each project shall be inspected in accordance with the CGP by a trained Environmental Inspector" and Paragraph 7.B states "each project shall also be inspected within 24 hours after the conclusion of a rain event and every 24 hours during an extended rain event."

Per the CGP, a rain event is considered a precipitation event of 0.5 inches or greater. An "extended rain event" as used in Paragraph 7.B, means consecutive 24 hour periods with 0.5 inches or greater rain events. This definition could lead to 2, 3, even 4 days in a row requiring inspections depending on the duration and magnitude of a rain event. Deficiencies noted during an inspection shall be addressed no later than 5 days after the inspection, or **prior to the next rain event**, whichever is sooner.

Rain event inspections are required regardless of whether it is a weekend or holiday. This requirement should be clearly addressed with project staff during the pre-construction meeting and planned for logistically during construction. Note, the project WPCM has the same requirement and is strongly encouraged to join the ITD Environmental Inspector during the rain event inspection.

Finally, you may be wondering how to collect rain event data for the project site. The best way to obtain good rainfall information is through use of on site rain gauges (as pictured below). For remote sites, gauges with telemetry should be considered to help reduce travel requirements and ensure compliance.



Examples of non-automated and automated rain gauges

ITD Form 2802 Guidance: Section 6 vs. Section 7

The following information clarifies how to properly complete Sections 6 and 7 of the current ITD Form 2802. In particular, regarding when a deficiency becomes an action item which should be addressed in Section 6 or simply an additional item of note which should be addressed in Section 7.

All Best Management Practice (BMP) deficiencies are considered action items that shall be included in Section 6. These items shall be properly addressed within 5 days of discovery or prior to the next rain event, whichever is sooner. This timeframe can be extended if site conditions preclude completion of an action item. Thorough documentation is required to explain why the action was not addressed. Examples of action items to include in Section 6 include:

- BMP maintenance
- Replacement of ineffective BMPs
- Installation of additional BMPs
- Updates to the Stormwater Pollution Prevention Plan (SWPPP) based on BMP deficiencies

Conversely, items noted during an inspection that are not deficiencies and therefore do not require action by the Contractor could be included in Section 7. Examples include:

- Reminder to submit a winter shutdown waiver request
- Clarification on environmental mitigation requirements
- Noting that an EPA or IDEQ compliance inspection occurred on site
- Establishing water quality monitoring requirements
- Other items not related to BMP or site deficiencies

Test Your Stormwater Management I.Q.:

1. What is the numbering convention for action items identified in Section 6 of the ITD Form 2802?
2. True or False: ITD is either a co-permittee or permittee to MS4 permits in each of the 6 ITD Districts?
3. Which position on the ITD organizational chart can responsibility for submitting a Notice of Intent (NOI) and signing and certifying a project SWPPP be delegated down to?
4. How frequently does the project SWPPP need to be updated?

ITD STORMWATER FREQUENTLY ASKED QUESTIONS (FAQs)

Q1: What is the most common problem that EPA finds during compliance inspections at construction sites?

A1: Based on information provided in the EPA SWPPP Preparation Guide Book, the most common issue observed during compliance inspections is opening up too much disturbed acreage without placement of BMPs. ITD restricts the allowable amount of disturbed acreage to 5 acres after which erosion and sediment controls must be installed. There can be exceptions to this rule. If the contractor believes greater than 5 acres is required, approval in writing from the RE is required. It is considered very good construction practice to limit the project's disturbed area to only areas necessary for the current phase of construction. Additional information can be found in the ITD Erosion and Sediment Control Manual under BMP 2.4.

Q2: Is maintenance of a BMP considered an action item that should be noted in Section 6 of the 2802? What if the maintenance or lack thereof has no chance of resulting in an illicit discharge?

A2: Per the CGP Part 3.6, an operator is required to maintain all control measures and other protective measures in effective operating condition. Whether or not the lack of maintenance would result in an illicit discharge to waters of the U.S. is irrelevant to whether the item is deemed an action item. To remain fully compliant with the CGP, ITD will list BMPs requiring maintenance as an action item in Section 6 of the 2802.

Q3: I've heard that there are new standard erosion and sediment control drawings. Where can I find the drawings and who do I contact with any questions?

A3: ITD's Environmental Section just finished a complete update of the standard erosion and sediment control drawings. They can be viewed at the following link:

<http://itd.idaho.gov/design/StandardDrawings.htm>

If you have questions about the new drawings, please contact Karissa Hardy in the ITD Environmental Section at HQ: (208)334-8476 or karissa.hardy@itd.idaho.gov

Quiz Answers:

1. Each action item is numbered using a two part system. The first part is the inspection report number and the second part is the action item number, e.g., the third action item on inspection report #21 would be identified as action item 21-3.
2. False. Currently, District 4 is neither a permittee nor co-permittee to an MS4 permit. District 2 does not have permit coverage to date although their MS4 permit is pending.
3. The Assistant District Engineer.
4. Per CGP Part 5.10.C, any required revisions to the SWPPP must be completed within seven (7) calendar days following the inspection.

BMP of the Quarter

BMP-3.3 COFFER DAM (Temporary)

Refer to: ITD Standard Specifications, Sections 210 and 501.

Description

A coffer dam is a temporary structure built into a waterway to contain or divert movement of water and to provide a reasonably dry construction area. Cofferdams are commonly made of steel sheet pile, rock, gabions, concrete jersey barriers, vinyl tubes filled with water, or wood and may be lined with geotextile, plastic sheeting, or other materials to prevent water from entering the construction area.

Applications

Cofferdam construction may be required for activities, such as stream alteration or construction of bridges, piers, or abutments that involve excavation or placement of soil and rock within a body of water.

Limitations

Under some conditions, the design must be developed or approved by a qualified licensed engineer. The coffer dam should be sturdy enough to withstand water pressure and scouring.





STORM EVENTS

Volume 5, Issue 4

ITD Quarterly Stormwater Newsletter

SUMMER 2011

Promoting Responsible Stormwater Management Practices Throughout the Idaho Transportation Department

Proposed Construction General Permit (CGP) Released by the EPA!

The 2008 CGP was originally set to expire in June of 2010. It was first extended until June 30, 2011, and now the EPA has extended it again, this time through January 31, 2012.

The proposed CGP was released for public comment on April 15, 2011. The public comment period ends July 11, 2011. To view the proposed CGP, go to:
<http://cfpub.epa.gov/npdes/stormwater/cgp.cfm>

The proposed CGP is generally more prescriptive and refines requirements to specific values and/or expectations. Highlights of some proposed changes and/or requirements include but are not limited to:

Authorization Process/Notices of Intent

- NOI "waiting period" increased from 7 days to 30 days

Erosion and Sediment Controls

- New buffer requirements for waters of the U.S.
- Installation of sediment controls prior to construction
- New sediment removal/maintenance requirements
- Project entrance and exit points must be stabilized for a minimum of 50 feet into the site
- Storm drain inlets must be protected
- New chemical treatment restrictions & requirements
- New dewatering controls and restrictions

Stabilization Requirements

- Criteria are proposed for both vegetative and non-vegetative stabilization
- Based on the Revised Universal Soil Loss Equation's (RUSLE) cover management factor, or "C-factor"

Pollution Prevention Requirements

Specific requirements and design standards including:

- Install secondary containment or cover activities
- Inspect all vehicles/equipment once per week
- Cover and protect exposed construction materials

Numeric & Water Quality Based Effluent Limits

- The proposed CGP does not specify NELs at this time, but includes a placeholder for when a final decision is made
- Projects that discharge to impaired waters will be subject to tighter stabilization requirements, more frequent inspections, and potentially water quality monitoring, sampling, and reporting depending on disturbance

Site Inspections

- Inspections after 0.25" rain events instead of 0.5"

For additional information on the proposed changes to the CGP, or to provide comments to EPA prior to July 11th, contact Brad Wolfinger at ITD Headquarters Environmental.

EPA Issues New Permit Writing Guidance for TMDLs, Stormwater

In November of 2010, EPA issued new guidance to permit writers and regulators who develop total maximum daily loads (TMDLs) on new considerations for stormwater and wasteload allocations (WLAs). Specifically, the new guidance updates 2002 EPA guidance and provides four major revisions:

- Numeric water quality based effluent limitations in stormwater NPDES permits
- Disaggregating stormwater sources in a WLA
- Using surrogates to establish TMDL loading capacity
- Treating load allocations as wasteload allocations

As a result of these changes, ITD could be impacted in the following ways:

- Future MS4 permits will likely be written with numeric limits for impairments
- Limits will likely be tied to TMDL and wasteload allocations assigned to stormwater discharges
- In the future, stormwater will likely be divided into separate sources much like wastewater:
 - E.g., ITD District X will be given a stormwater WLA
 - E.g., City of Boise will be given a stormwater WLA

Perhaps the most significant impact of this change is that, in future MS4 permits, ITD could face stringent discharge limits similar to those established for wastewater treatment plants. Implementation of the new guidance will likely take multiple years, so impacts to ITD are unclear, but will likely be minimal in the near term.

Test Your Stormwater Management I.Q.:

1. True or False. As defined by the CGP, the range of annual precipitation associated with a "semi-arid" area is 10 – 20 inches.
2. If a project does not require NPDES coverage, does ITD still have to manage pollutants?
3. What does TMDL stand for?
4. True or False. ITD has to conduct a stormwater management inspection within 24 hours of the conclusion of a rain event even if the project team is inspecting on a weekly basis.

ITD STORMWATER FREQUENTLY ASKED QUESTIONS (FAQs)

Q1: If the 2006 Consent Decree is terminated, will ITD continue to require the Prime Contractor to have a trained and certified Water Pollution Control Manager (WPCM) assigned to all projects with CGP coverage?

A1: ITD has not formalized any decisions on which components of the 2006 Consent Decree will be established as ongoing stormwater management requirements. It is likely that the WPCM requirement will be carried forward albeit with potentially revised training materials and requirements.

Q2: If a project meets the criteria to qualify for the Low Erosivity Waiver (LEW) as specified in the CGP, what type of stormwater management paperwork is required, if any?

A2: It is strongly recommended that project staff treat the project as if it were an NPDES project and maintain SWPPP and inspection paperwork. By doing so, ITD is better managing potential risk of non-compliance should the project exceed either the minimum acreage to qualify for the LEW (less than 5 acres) or have schedule extensions that cause the Erosivity Factor, or R-value, to exceed 5 and therefore require NPDES coverage under the CGP. This has occurred on several occasions in the last couple years and has resulted in minimal impacts to the project since all the paperwork and compliance documentation had been being maintained as if it were a SWPPP project.

Q3: During the completion of the ITD Stormwater Management Course for Designers, there was discussion of a potential "200 Level" course that would serve as a follow-up to the initial course and provide more detailed training on BMP selection and design. When can we expect the advanced designer course?

A3: ITD is committed to providing additional stormwater management training to all the key staff involved in the development and implementation of stormwater management strategies for construction projects. ITD training and environmental staff is currently discussing what a 200 level course would look like and how it might be taught. Stay tuned for information and updates.

Quiz Answers:

1. True. Per CGP Appendix A.
2. Yes. State Water Quality Standards would still apply. As a result, the ITD requires the development of an Erosion and Sediment Control Plan for all non-NPDES projects.
3. TMDL stands for Total Maximum Daily Load.
4. True. Per the Consent Decree Paragraph 7.B, ITD "shall also inspect within 24 hours after the conclusion of a rain event and every 24 hours during an extended rain event." This would apply no matter the regular inspection frequency.

BMP-3.10 STREAM CROSSING (Temporary)

ITD Standard Specifications, Section 602.

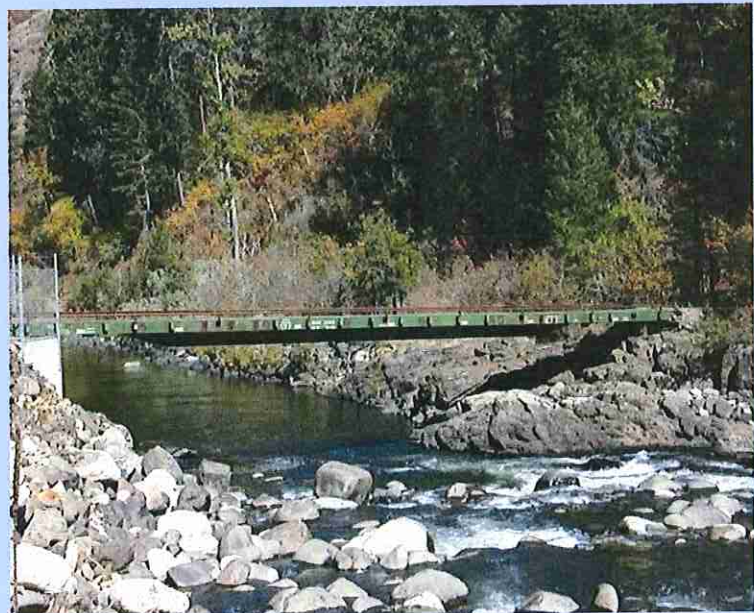
BMP of the Quarter

Description. A temporary stream crossing (a bridge or culvert) provides a means for construction vehicles to cross streams or watercourses without damaging the streambed or channel, and protects the stream bank from further degradation and sediment loss.

Applications. Temporary stream crossings should be installed only when it is necessary to cross a stream and a permanent crossing is not feasible or not yet constructed. A stream crossing is used when heavy equipment must be moved from one side of a stream channel to another, or where light-duty construction vehicles have to cross the stream channel frequently for a short period. The specific loads and the stream conditions will dictate which of the following types of stream crossing to employ.

Bridge: Where conditions are adequate, bridges are the preferred method to cross a stream. A bridge provides the least disturbance or obstruction to flows and fish migration. Old flatbed rail cars in some instances can be used effectively to bridge a stream.

Culvert: A culvert may be used for stream crossings where conditions are not adequate for bridges.





STORM EVENTS

Volume 6, Issue 1

ITD Quarterly Stormwater Newsletter

Fall 2011

Promoting Responsible Stormwater Management Practices throughout the Idaho Transportation Department

The Mica Bay Consent Decree Has Been Terminated

Effective August 1, 2011, U.S. District Court Judge Lodge terminated the ITD Consent Decree with the EPA, which had been in place since June 21, 2006. ITD is no longer subject to the mandatory decree requirements, however many of the provisions will continue to remain in ITD specifications and standard operating procedures. The Environmental Section is working with District staff to determine the best course of action for ITD's program.

Test Your Stormwater Management I.Q.:

1. What does MS4 stand for?
2. Can you name the other states that do not have primacy for their NPDES stormwater program?
3. What was the name of the river in Ohio with high levels of pollution, along with other events, that led to the 1972 Clean Water Act?
4. What ITD specification is focused on erosion and sediment control?

Introduction to the Updated ITD Stormwater Management Web Site

Idaho Transportation Department

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Stormwater

Stormwater means stormwater runoff, snow melt runoff, surface runoff and drainage. Stormwater runoff may pick up and transport sediment, oil, and other pollutants. If not managed properly these pollutants can affect the quality of surface waters making them unsafe for drinking, fishing, swimming, or other activities.

Clean Water Act (CWA)

In 1972, Congress passed the Federal Water Pollution Control Act Amendments "to restore and maintain the integrity of the Nation's waters. The Clean Water Act (CWA) is a 1977 amendment to the Federal Water Pollution Control Act of 1949, which established the basic structure for regulating discharges of pollutants to waters of the U.S."

National Pollution Discharge Elimination System (NPDES)

ITD has recently updated its Stormwater Management Web Site to remove Consent Decree related material and to provide easily accessible guidance and information on stormwater topics from permit requirements to forms and templates. Some of the current features include:

- Links to CGP, MS4, and MSGP compliance pages
- Link to the new Stormwater Management Plan page that will ultimately provide guidance and direction for all stormwater management requirements
- Links to the new BMP Manual with each BMP being a separate PDF to increase user friendliness and accessibility
- All the latest versions of stormwater management forms & templates
- Links to various Stormwater Management Training materials
- Links to the updated Qualified Product List (QPL)

The link to the website is:
<http://www.itd.idaho.gov/enviro/Storm%20water/default.htm>

Contact Brad Wolfinger at 334-8163 with any questions, comments or feedback.

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Stormwater Management Plan (SWMP)

[Glossary of Abbreviations](#) 8/2011

Stormwater Forms and Templates:

ITD-2784 Form - Stormwater Site Assessment (for Design)	9/2011
ITD-2802 Form - Stormwater Compliance Inspection Form	8/2011
ITD-2790 Form - Notice of Potential Violation of CGP or Notice of Discharge Event	8/2011
ITD Stormwater Pollution Prevention Plan (SWPPP) Template	9/2011
EPA SWPPP Template for Unauthorized States	9/2007
ITD Design Phase Stormwater Management Checklist	8/2011
ITD SWPPP Review Checklist	8/2011
EPA SWPPP Guidance - Developing Your Stormwater Pollution Prevention Plan	1/2007
ITD SWPPP Delegation of Authority Form	8/2011
ITD Example SWPPP Total Maximum Daily Load (TMDL) Language	8/2011
ITD Erosion & Sediment Control (ESCP) Pollution Prevention Plan Template	Coming Soon
ITD Guidance Document - 50 Ways to Get a Fine from the EPA	8/2011
Contractor Request to File Notice of Termination	8/2011

ITD STORMWATER FREQUENTLY ASKED QUESTIONS (FAQS)

Q1: Are there any updates on when the new NPDES Construction General Permit (CGP) may be issued by the EPA? Will Numeric Effluent Limits (NELs) be included?

A1: The original date set for issuance of the new CGP was July 2010. Since then, EPA has proposed numerous extensions for the permit, and issuance of the new CGP is currently scheduled for February 15, 2012. Currently, NELs will not be included in this version of the permit. EPA has stayed the numeric limitation of 280 NTU that was published in the December 1, 2009 Construction and Development rule. EPA will propose a revised limit in a future rulemaking after further evaluation of the data supporting this part of the permit.

Quiz Answers:

1. Municipal Separate Storm Sewer System.
2. In addition to Idaho, there are three other states that do not have NPDES stormwater primacy including New Mexico, New Hampshire, and Massachusetts.
3. The Cuyahoga River in Cleveland, Ohio.
4. Specification 212 is solely focused on stormwater erosion and sediment control requirements.

Q2: What's going to happen to the Clean Water Act Contractor's Note now that the Mica Bay Consent Decree has been terminated?

A2: An interim Clean Water Act Compliance note was developed in August removing Consent Decree requirements. ITD just completed a benchmarking study of 8 other state DOTs' stormwater management specifications to identify how other DOTs deal with various construction stormwater management requirements. Based on this information, and collaboration with the Districts and Contracting community, a new ITD stormwater specification will be issued in the coming months.

Q3: We've been hearing that significant changes and updates to the ITD BMP Manual are in the works. Is there a timeline for when these will be released and where we can find the information?

A3: We are pleased to announce that updates to the ITD BMP Manual are complete and can be found on the ITD Stormwater Management web page (see link below). The section below provides a brief overview of the changes and new types of BMPs that are now available to ITD, consultants, and Contractors.

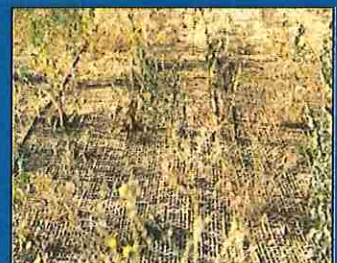
Hot off the Press: The Updated ITD BMP Manual

http://www.itd.idaho.gov/enviro/storm%20water/SW_Mgmt_Plan/default.htm

In late August, the updated Best Management Practices (BMP) Manual was posted to ITD's Stormwater Management web site. This manual enhances and replaces ITD's Best Management Practices Erosion and Sediment Control Manual. The new manual has a different format, and an extensive addition of new BMPs have been added under several new BMP categories. The new manual is broken down into the following chapters:

- 1) Temporary Erosion Control BMPs
- 2) Temporary Sediment Control BMPs
- 3) Non-stormwater BMPs
- 4) Waste Management BMPs; and
- 5) Post-construction BMPs

Entire manual chapters and individual BMPs are all available as PDFs on the web site noted above. Each chapter has a version date associated with it. When updates or changes are made, that version date will reflect the most recent update. There are also forms that can be used to provide comments or recommendations on any changes or improvements to any of the BMPs. Please provide feedback as needed.





STORM EVENTS

Volume 6, Issue 2

ITD Quarterly Stormwater Newsletter

Winter 2011

Promoting Responsible Stormwater Management Practices throughout the Idaho Transportation Department and Beyond

Even with Termination of the 2006 EPA Consent Decree, Stormwater Compliance Remains Big Priority.

Termination of the Consent Decree on August 1, 2011 was a major achievement for ITD. ITD was able to do this by making big improvements to our practices, processes and procedures as they pertain to stormwater compliance. We have provided training to our staff, we have developed tracking and documentation processes and procedures, and we have developed a philosophy that stormwater compliance is not just the law but is also the right thing to do to protect our precious water resources in Idaho. Our process improvements and the spotlight we have put on this issue are the reasons the Decree has been retired. I would like to thank ITD staff and the Contracting community for their efforts in making this happen.

With the Decree behind us, we have experienced the financial and resource burden of being under it and we must ensure that we never go back. Many of the practices ITD initiated under the Decree will continue on our ground disturbing projects. We expect our own staff and our Contractors to continue to place a high importance on stormwater compliance.

*Tom Cole
Chief Engineer*

Certification Extension Guidelines for Contractor's Water Pollution Control Managers

ITD has been requiring a certified Water Pollution Control Manager (WPCM) on any project that requires coverage under the CGP. ITD requires all Contractors to designate a WPCM having attended an ITD certified 16 hour Stormwater Management training course, in order to ensure the Contractor has an onsite representative who is competent to serve as the Contractor's lead on stormwater management issues.

With the termination of the 2006 EPA Stormwater Consent Decree, ITD can determine its own training requirements as long as the minimum requirements of the CGP are being met. ITD intends to continue to require a WPCM on all CGP permitted projects as this has become a standard industry practice. Because a new CGP is currently scheduled for release on February 15, 2012 and any training completed prior to that would be followed immediately by a significant regulatory change, the following criteria can be used for certification extensions to previously trained WPCMs.

ITD will extend existing WPCM certifications until at least March 31, 2012 if one of two requirements is met:

1. WPCM was trained after Nov 1, 2010 or
2. WPCM was trained between Nov 1, 2009 and Nov 1, 2010 and can provide documentation that demonstrates they have actively been working as a WPCM on an ITD project. This documentation should be submitted to the District or LHTAC along with the Contractors final SWPPP submittal or at the preconstruction meeting.

Brad Wolfinger at Headquarters Environmental has records to help the District verify that a WPCM has been active on ITD projects. His contact information is: brad.wolfinger@itd.idaho.gov 208-334-8163

Test Your Stormwater Management I.Q.:

1. What does NPDES stand for?
2. True or False: Idaho is one of only four states that does not have primacy for its NPDES program?
3. Per the CGP, what average annual rainfall defines an area as semi-arid?
4. Can the EPA still inspect ITD projects even though the Consent Decree has been terminated?

ITD STORMWATER FREQUENTLY ASKED QUESTIONS (FAQs)

Q1: Is there a formal policy for how stormwater management may transition from construction to maintenance while a project awaits final stabilization?

A1: Currently, there is no formal policy as each District has an approach that works for its particular staff on any given project. However, no matter the approach taken, ITD must continue to perform stormwater compliance inspections until final stabilization is achieved and the Notice of Termination (NOT) is filed. It should be noted that inspection frequencies can decrease if construction is complete, the entire project has been temporarily stabilized, and the project is awaiting final stabilization. See CGP Part 4.B for further information.

Quiz Answers:

1. National Pollutant Discharge Elimination System.
2. True. Idaho along with New Mexico, New Hampshire, and Massachusetts do not have state primacy over their NPDES program.
3. Per CGP Appendix A, semi-arid areas are defined by average annual rainfall of between 10 – 20 inches.
4. Yes, per CGP part 5.11.C, the EPA can review a SWPPP and inspect a project at any time.

Q2: My Stormwater Inspector Training Certification is about to expire. Do I need to renew my training certification and if so, will there be another course offered soon?

A2: Due to the recent termination of the Consent Decree, anticipated changes in the new CGP in February 2012, and upcoming re-training needs, HQ Environmental formally requested HQ Training extend all ITD Stormwater Inspector certifications until at least March 31, 2012. HQ Environmental and Training will keep the Districts posted on future training opportunities for not only Inspectors but all ITD staff.

Q3: Being one of only 4 states without NPDES primacy, what are the chances that the State of Idaho (IDEQ) will pursue primacy for the NPDES program?

A3: There have been several initiatives over the years attempting to encourage the Idaho Legislature to obtain primacy over the NPDES program. Each time the initiatives have gone in front of the Legislature, they have been rejected primarily due to the significant annual cost of running a state-lead NPDES program. The likelihood that the state will assume primacy any time soon is low given the current economic climate.

EC-16 SNOW ACCUMULATION MANAGEMENT

Definition and Purpose

At construction sites, snow can accumulate on disturbed areas and in drainages prior to cover being established. This BMP involves the installation of snow barriers to reduce the amount of erosion on disturbed areas. Temporary snow barriers are most commonly constructed from synthetic materials; however, boards, hay bales, rocks, and other similar materials can be used as well.

Appropriate Applications

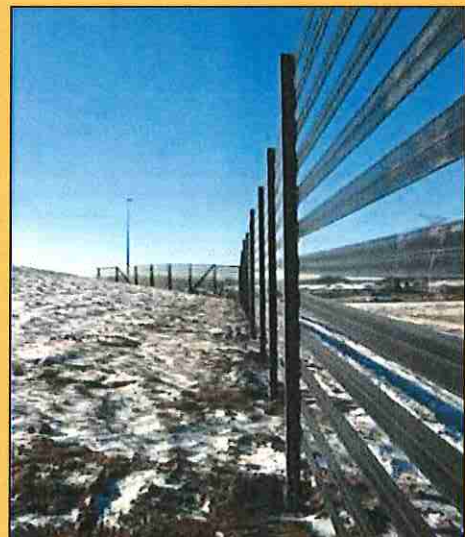
In areas where snow drifts of 5 to 10 feet in depth occur, snow fences can be installed to prevent snow from accumulating on sensitive areas. This practice will minimize erosive snowmelt runoff and ice blockages. Snow fencing can be used in conjunction with EC-2 (Preservation of Existing/Natural Vegetation) and EC-14 (Wind Erosion Control).

Limitations

Snow fences are difficult to install on steep slopes and rocky surfaces. Snow fences may not be cost effective when large areas need to be protected from snow accumulation. Removal at the end of the project is manpower intensive.

As discussed in the previous newsletter, the updated Best Management Practices (BMP) Manual was posted to ITD's Stormwater Management web site in late August. This manual enhances and replaces ITD's Best Management Practices Erosion and Sediment Control Manual. The updated BMP Manual can be found at: <http://www.itd.idaho.gov/enviro/storm%20water/BMP/default.htm>

BMP of the Quarter



ENVIRONMENTAL OPEN HOUSE

September 27, 2011

(Please Print)

NAME	ADDRESS	COMMENT
ERIC SHANLEY	11341 N. Ramsey Rd.	LAMES Highway District
RIK VAN GELDER	11341 N. Ramsey Rd.	
Jason Black	116 W 22nd AVE	
Adrienne Cronkough	408 Sherman Ave	
Mike HARTZ	800 W. Prairie AVE	ITD
Steve Roberg	4226 N. manufacturing way	
Judy House	City of CDA	
Jacquelyn Bolen	KOOTENAI COUNTY SOLID WASTE	
Kim Harrington	1041 Frazier PF	
Becky Byers	1031 N. Academic way	Suite 142 CDA
Seon Holm	710 E Mullan CDA	
REBEKA STEVENS	COEUR D'ALENE TRIBE	PLEASE CONTACT FOR 2012 OPEN HOUSE
Deb Fairbairn	Coeur d'Alene City	
Terrie GRIFFIN	CDA Library	Good Staff
DAVID TOWNSEND	CDA Library	
Anneke Connaway	1418 2nd	
Eric Olson	3201 N Huetter #102	Rena-Yensen / PFHD
Jim Mackey	C.H. F.CDA water 3820 Ramsey Rd.	
Kelly Brownsberger	5629 Selkirk Way P.F. Id.	PFHD
Huijin Zhang	University of Idaho. Moscow.	
Sherry Conklin	City of CDA	
Opalene Moss	"	

September 27, 2011

NAME

COMMENT

[illegible]

ATL Accurate Testing Labs, LLC

7950 Meadowlark Way Coeur d'Alene, ID 83815 Phone (208) 762 8378 Fax (208) 762 9082
Web site: www.accuratetesting.com E-mail: info@accuratetesting.com

Wally Brown
Idaho Transportation Dept
600 W. Prairie Ave
Coeur d'Alene, ID 83815

Order No.: 2011040159
Description: CDA MS4 Sampling

Date Received: 04/11/2011

Certificate of Analysis

Sample No.: 1
Location: Below Sherman IC
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 04/11/2011 08:40:
Collected By: Mike Hartz

Analyte	Result	Unit	PQL	Method	Analysis Date	Analyst
Total Suspended Solids	13.0	mg/L	1	SM 2540	04/14/2011	AC
Phosphorus, Total	0.066	mg/L	0.025	EPA 365.3	04/18/2011	WM
Total Nitrogen (N)	0.59	mg/L	0.08	SM 4500N B/4110	04/18/2011	WM
Total Kjeldahl Nitrogen (N)	0.27	mg/L	0.04	SM 4500N B	04/15/2011	AC
Nitrate-N	ND	mg/L	0.5	SM 4110B NO3	04/12/2011	WM
Nitrite-N	ND	mg/L	0.5	SM 4110B NO2	04/12/2011	WM
Lead	ND	mg/L	0.010	SM 3120	04/18/2011	WM
Zinc	0.019	mg/L	0.013	SM 3120	04/18/2011	WM
Hardness, Total (as CaCO3)	30.3	mg/L	0.2	SM 2340	04/18/2011	WM
Calcium	7.51	mg/L	0.17	EPA 200.7	04/18/2011	WM
Magnesium	2.81	mg/L	0.03	EPA 200.7	04/18/2011	WM
Arochlor 1016	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1221	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1232	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1242	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1248	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1254	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1260	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA

Sample No.: 2
Location: Above Sherman IC
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 04/11/2011 09:03:
Collected By: Mike Hartz

Analyte	Result	Unit	PQL	Method	Analysis Date	Analyst
Total Suspended Solids	17.0	mg/L	1	SM 2540	04/14/2011	AC
Phosphorus, Total	0.065	mg/L	0.025	EPA 365.3	04/18/2011	WM
Total Nitrogen (N)	0.53	mg/L	0.08	SM 4500N B/4110	04/18/2011	WM
Total Kjeldahl Nitrogen (N)	0.26	mg/L	0.04	SM 4500N B	04/15/2011	AC

$Q = 8.63 \text{ cfs}$
 $W. Temp = 50^{\circ} F.$

ATL Accurate Testing Labs, LLC

7950 Meadowlark Way Coeur d'Alene, ID 83815 Phone (208) 762 8378 Fax (208) 762 9082
Web site: www.accuratetesting.com E-mail: info@accuratetesting.com

Wally Brown
Idaho Transportation Dept
600 W. Prairie Ave
Coeur d'Alene, ID 83815

Order No.: 2011040159
Description: CDA MS4 Sampling

Date Received: 04/11/2011

Certificate of Analysis

Sample No.: 2
Location: Above Sherman IC
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 04/11/2011 09:03:
Collected By: Mike Hartz

Analyte	Result	Unit	PQL	Method	Analysis Date	Analyst
Nitrate-N	ND	mg/L	0.5	SM 4110B NO3	04/12/2011	WM
Nitrite-N	ND	mg/L	0.5	SM 4110B NO2	04/12/2011	WM
Lead	ND	mg/L	0.010	SM 3120	04/18/2011	WM
Zinc	0.025	mg/L	0.013	SM 3120	04/18/2011	WM
Hardness, Total (as CaCO3)	22.5	mg/L	0.2	SM 2340	04/18/2011	WM
Calcium	5.75	mg/L	0.17	EPA 200.7	04/18/2011	WM
Magnesium	1.97	mg/L	0.03	EPA 200.7	04/18/2011	WM
Arochlor 1016	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1221	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1232	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1242	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1248	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1254	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1260	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA

Sample No.: 3
Location: French Gulch
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 04/11/2011 09:23:
Collected By: Mike Hartz

Analyte	Result	Unit	PQL	Method	Analysis Date	Analyst
Total Suspended Solids	8.00	mg/L	1	SM 2540	04/14/2011	AC
Phosphorus, Total	0.067	mg/L	0.025	EPA 365.3	04/18/2011	WM
Total Nitrogen (N)	0.478	mg/L	0.08	SM 4500N B/4110	04/18/2011	WM
Total Kjeldahl Nitrogen (N)	0.17	mg/L	0.04	SM 4500N B	04/15/2011	AC
Nitrate-N	ND	mg/L	0.5	SM 4110B NO3	04/12/2011	WM
Nitrite-N	ND	mg/L	0.5	SM 4110B NO2	04/12/2011	WM
Lead	ND	mg/L	0.010	SM 3120	04/18/2011	WM
Zinc	ND	mg/L	0.013	SM 3120	04/18/2011	WM

$Q = 4.93 \text{ cfs}$
 $W_{Temp} = 50^{\circ}F$

ATL Accurate Testing Labs, LLC

7950 Meadowlark Way Coeur d'Alene, ID 83815 Phone (208) 762 8378 Fax (208) 762 9082
Web site: www accuratetesting.com E-mail: info@accuratetesting.com

Wally Brown
Idaho Transportation Dept
600 W. Prairie Ave
Coeur d'Alene, ID 83815

Order No.: 2011040159
Description: CDA MS4 Sampling

Date Received: 04/11/2011

Certificate of Analysis

Sample No.: 3 *No Q - Meter died*
Location: French Gulch
Sample Type: GRABS *W. Temp = 49°F*

Matrix: Non-Potable Water
D/T Collected: 04/11/2011 09:23:
Collected By: Mike Hartz

Analyte	Result	Unit	PQL	Method	Analysis Date	Analyst
Hardness, Total (as CaCO3)	40.4	mg/L	0.2	SM 2340	04/18/2011	WM
Calcium	9.93	mg/L	0.17	EPA 200.7	04/18/2011	WM
Magnesium	3.78	mg/L	0.03	EPA 200.7	04/18/2011	WM
Arochlor 1016	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1221	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1232	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1242	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1248	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1254	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1260	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA

Sample No.: 4 *No Q - Meter died*
Location: 15th Street IC *W. Temp = 51°F*
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 04/11/2011 09:42:
Collected By: Mike Hartz

Analyte	Result	Unit	PQL	Method	Analysis Date	Analyst
Total Suspended Solids	31.0	mg/L	1	SM 2540	04/14/2011	AC
Phosphorus, Total	0.078	mg/L	0.025	EPA 365.3	04/18/2011	WM
Total Nitrogen (N)	0.83	mg/L	0.08	SM 4500N B/4110	04/18/2011	WM
Total Kjeldahl Nitrogen (N)	0.43	mg/L	0.04	SM 4500N B	04/15/2011	AC
Nitrate-N	ND	mg/L	0.5	SM 4110B NO3	04/12/2011	WM
Nitrite-N	ND	mg/L	0.5	SM 4110B NO2	04/12/2011	WM
Lead	ND	mg/L	0.010	SM 3120	04/18/2011	WM
Zinc	0.065	mg/L	0.013	SM 3120	04/18/2011	WM
Hardness, Total (as CaCO3)	21.0	mg/L	0.2	SM 2340	04/18/2011	WM
Calcium	6.36	mg/L	0.17	EPA 200.7	04/18/2011	WM
Magnesium	1.24	mg/L	0.03	EPA 200.7	04/18/2011	WM
Arochlor 1016	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA

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Wally Brown
Idaho Transportation Dept
600 W. Prairie Ave
Coeur d'Alene, ID 83815

Order No.: 2011040159
Description: CDA MS4 Sampling

Date Received: 04/11/2011

Certificate of Analysis

Sample No.: 4
Location: 15th Street IC
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 04/11/2011 09:42:
Collected By: Mike Hartz

Analyte	Result	Unit	PQL	Method	Analysis Date	Analyst
Arochlor 1221	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1232	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1242	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1248	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1254	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA
Arochlor 1260	ND	ug/L	0.2	EPA 8082	04/15/2011	ANA

Accurate Testing Labs, LLC

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Certificate of Analysis

Order No.: **2011060247**

Page: 1 of 4

Wallace Brown
Huetter POE
600 W. Prairie Ave
Coeur d'Alene, ID 83815

Description: MS 4 French Gulch -I90
Date Received: 06/13/2011 10:40

Sample: 1
Location: Bel Sherman IC
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 06/13/2011 09:00
Collected by: Wallace Brown

Analyte	Result	Unit	Method	PQL	Prep Date	Test Date	Analyst
Arochlor 1016	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1221	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1232	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1242	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1248	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1254	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1260	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Calcium	8.96	mg/L	EPA 200.7	0.17		06/20/11	WM
Hardness, Total (as CaCO3)	36.3	mg/L	SM 2340	0.2		06/20/11	WM
Lead	ND	mg/L	SM 3120	0.010		06/16/11	WM
Magnesium	3.34	mg/L	EPA 200.7	0.03		06/20/11	WM
Nitrate-N	ND	mg/L	SM 4110B NO3	0.5		06/14/11	WM
Nitrite-N	ND	mg/L	SM 4110B NO2	0.5		06/14/11	WM
Phosphorus, Total	0.0686	mg/L	EPA 365.3	0.025		06/20/11	WM
Total Kjeldahl Nitrogen (N)	0.38	mg/L	SM 4500N B	0.04		06/20/11	AC
Total Nitrogen (N)	0.38	mg/L	SM 4500N	0.08		06/20/11	WM
Total Suspended Solids	16	mg/L	SM 2540	1		06/16/11	AW
Zinc	ND	mg/L	SM 3120	0.013		06/16/11	WM

$Q = 2.15 \text{ cfs}$
 $W. Temp = 14^{\circ}C$

Comments:

Laboratory Supervisor
Walter Mueller

Date: 06/24/11

ND: Not Detected PQL: Practical Quantitation Limit
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Certificate of Analysis

Order No.: **2011060247**

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Sample: **2**
Location: Above Sherman *Ic*
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 06/13/2011 09:20
Collected by: Wallace Brown

Analyte	Result	Unit	Method	PQL	Prep Date	Test Date	Analyst
Arochlor 1016	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1221	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1232	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1242	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1248	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1254	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1260	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Calcium	9.08	mg/L	EPA 200.7	0.17		06/20/11	WM
Hardness, Total (as CaCO3)	32.3	mg/L	SM 2340	0.2		06/20/11	WM
Lead	ND	mg/L	SM 3120	0.010		06/16/11	WM
Magnesium	2.31	mg/L	EPA 200.7	0.03		06/20/11	WM
Nitrate-N	ND	mg/L	SM 4110B NO3	0.5		06/14/11	WM
Nitrite-N	ND	mg/L	SM 4110B NO2	0.5		06/14/11	WM
Phosphorus, Total	0.0717	mg/L	EPA 365.3	0.025		06/20/11	WM
Total Kjeldahl Nitrogen (N)	0.54	mg/L	SM 4500N B	0.04		06/20/11	AC
Total Nitrogen (N)	0.54	mg/L	SM 4500N	0.08		06/20/11	WM
Total Suspended Solids	14	mg/L	SM 2540	1		06/16/11	AW
Zinc	0.021	mg/L	SM 3120	0.013		06/16/11	WM

Q = 1.04 cfs
W. Temp = 14°C

Comments:

Laboratory Supervisor Date: 06/24/11

Walter Mueller

ND: Not Detected PQL: Practical Quantitation Limit

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Certificate of Analysis

Order No.: **2011060247**

Page: 3 of 4

Sample: **3**
Location: French Gulch
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 06/13/2011 09:40
Collected by: Wallace Brown

Analyte	Result	Unit	Method	PQL	Prep Date	Test Date	Analyst
Arochlor 1016	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1221	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1232	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1242	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1248	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1254	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1260	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Calcium	14.1	mg/L	EPA 200.7	0.17		06/20/11	WM
Hardness, Total (as CaCO3)	57.5	mg/L	SM 2340	0.2		06/20/11	WM
Lead	ND	mg/L	SM 3120	0.010		06/16/11	WM
Magnesium	5.33	mg/L	EPA 200.7	0.03		06/20/11	WM
Nitrate-N	ND	mg/L	SM 4110B NO3	0.5		06/14/11	WM
Nitrite-N	ND	mg/L	SM 4110B NO2	0.5		06/14/11	WM
Phosphorus, Total	0.0517	mg/L	EPA 365.3	0.025		06/20/11	WM
Total Kjeldahl Nitrogen (N)	0.17	mg/L	SM 4500N B	0.04		06/20/11	AC
Total Nitrogen (N)	0.17	mg/L	SM 4500N	0.08		06/20/11	WM
Total Suspended Solids	2	mg/L	SM 2540	1		06/16/11	AW
Zinc	ND	mg/L	SM 3120	0.013		06/16/11	WM

$$Q = 0.59 \text{ cfs}$$

$$W. Temp = 13^{\circ}C$$

Comments:

Laboratory Supervisor

Date: 06/24/11

Walter Mueller

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Certificate of Analysis

Order No.: 2011060247

Page: 4 of 4

Sample: 4
Location: 15th Street IC
Sample Type: GRABS

Matrix: Non-Potable Water
D/T Collected: 06/13/2011 10:00
Collected by: Wallace Brown

Analyte	Result	Unit	Method	PQL	Prep Date	Test Date	Analyst
Arochlor 1016	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1221	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1232	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1242	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1248	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1254	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Arochlor 1260	ND	ug/L	608/8081A/8082	0.2		06/20/11	ANA
Calcium	9.82	mg/L	EPA 200.7	0.17		06/20/11	WM
Hardness, Total (as CaCO3)	33.3	mg/L	SM 2340	0.2		06/20/11	WM
Lead	0.011	mg/L	SM 3120	0.010		06/16/11	WM
Magnesium	2.11	mg/L	EPA 200.7	0.03		06/20/11	WM
Nitrate-N	ND	mg/L	SM 4110B NO3	0.5		06/14/11	WM
Nitrite-N	ND	mg/L	SM 4110B NO2	0.5		06/14/11	WM
Phosphorus, Total	0.189	mg/L	EPA 365.3	0.025		06/20/11	WM
Total Kjeldahl Nitrogen (N)	1.40	mg/L	SM 4500N B	0.04		06/20/11	AC
Total Nitrogen (N)	1.40	mg/L	SM 4500N	0.08		06/20/11	WM
Total Suspended Solids	83	mg/L	SM 2540	1		06/16/11	AW
Zinc	0.13	mg/L	SM 3120	0.013		06/16/11	WM

$Q = 0.14 \text{ cfs}$

W. Temp = 15°C

Comments:

Laboratory Supervisor Date: 06/24/11

Walter Mueller

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Certificate of Analysis

Order No.:

2011110302

Page: 1 of 1

Wally Brown
Idaho Transportation Dept
600 W. Prairie Ave
Coeur d'Alene, ID 83815

Description:
I-90 MS4 Sampling

Date Received: 11/22/2011 08:05

Sample: 1
Location: Sherman IC
Sample Type: Grabs

Matrix: Non-Potable Water
D/T Collected: 11/22/2011 07:30
Collected by: Mike Hartz

Analyte	Result	Unit	Method	PQL	Test Date	Analyst
Arochlor 1016	ND	ug/L	EPA 8082	0.2	11/29/11	ANA
Arochlor 1221	ND	ug/L	EPA 8082	0.2	11/29/11	ANA
Arochlor 1232	ND	ug/L	EPA 8082	0.2	11/29/11	ANA
Arochlor 1242	ND	ug/L	EPA 8082	0.2	11/29/11	ANA
Arochlor 1248	ND	ug/L	EPA 8082	0.2	11/29/11	ANA
Arochlor 1254	ND	ug/L	EPA 8082	0.2	11/29/11	ANA
Arochlor 1260	ND	ug/L	EPA 8082	0.2	11/29/11	ANA
Calcium	2.35	mg/L	EPA 200.7	0.17	11/29/11	WM
Hardness, Total (as CaCO3)	10.4	mg/L	SM 2340	0.2	11/29/11	WM
Lead	ND	mg/L	SM 3120	0.01	11/23/11	WM
Magnesium	1.09	mg/L	EPA 200.7	0.03	11/29/11	WM
Nitrate-N	ND	mg/L	SM 4110B NO3	0.5	11/23/11	WM
Nitrite-N	ND	mg/L	SM 4110B NO2	0.5	11/23/11	WM
Phosphorus, Total	0.155	mg/L	EPA 365.3	0.025	11/29/11	WM
Total Kjeldahl Nitrogen (N)	0.510	mg/L	SM 4500N B	0.04	12/01/11	AR
Total Nitrogen (N)	0.510	mg/L	SM 4500N	0.04	12/01/11	WM
Total Suspended Solids	47	mg/L	SM 2540	1	11/23/11	AR
Zinc	0.039	mg/L	SM 3120	0.01	11/23/11	WM

$Q = 13.65$

W. Temp = 38° F

Comments:

Laboratory Supervisor

Date: 12/02/11

Walter Mueller

ND: Not Detected PQL: Practical Quantitation Limit